Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the matter of:	**)**	
	)	
Comments requested regarding the proposed	**)**	**MM Docket No. 99-325**
Use of separate antennae for hybrid FM IBOC	**)**	
Transmissions.	**)**	

COMMENTS

These comments are being submitted in response to the Commission's Public Notice[1] requesting comment on the National Association of Broadcasters ("NAB") report suggesting the use of separate antennae for the analog and digital components of the hybrid FM in-band, on-channel (IBOC) signal.

I wholeheartedly support the recommendations of the NAB report, for several reasons. Perhaps the most compelling reason, in the face of shrinking technical budgets, is cost. I have been charged with coordinating the rollout of IBOC systems for Infinity Broadcasting Corporation's (Infinity) West Coast radio stations. Most of Infinity's FM stations will be forced to use the "high power" option which requires separate transmitters for analog and digital into a passive combiner. If the current "preferred method" of high power combined transmission is used, some 90% of the digital transmitter's power is wasted in the form of heat. Additionally, 10% of the analog transmitter's power is also wasted in the combining process.

By employing the separate antenna approach, stations that must use the high power option will be able to use digital transmitters one-tenth the size and power consumption. And by using existing licensed auxiliary antenna facilities, replacing the station's main antenna will, in most instances, be unnecessary.

Many stations forced to use high level combining on an existing antenna will be faced with the real possibility their facilities (antennae and transmission lines) are incapable of handling the extra power involved in passing the broadband IBOC signal. Many stations will also find their facilities have been designed to "fit" their licenses with transmitters and antennae performing at or near their maximum. Whole system replacement will be necessary in many cases where separate antennae cannot be employed.

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[1] **Public Notice, MM Docket No. 99-325, DA 03-3898, December 8, 2003.**

The NAB's report suggests:

1. **Using an existing, licensed auxiliary antenna for digital transmission;**
2. **Locating the auxiliary antenna within three seconds of latitude and longitude of the station's main antenna, and;**
3. **Height above average terrain to be between 70 and 100 percent of the main antenna height.**

These suggestions already conform to standard "good engineering practices" as most stations have as their goal, a backup facility closely matched to their main. Stations could still employ their auxiliary antenna as a backup in the event of a main analog system failure negating the need for addition antenna purchases and tower aperture space.

The NAB recommendations are made in light of field studies that support the Commission's goal to guard against analog signal interference while protecting digital signal quality.

CONCLUSIONS

I strongly support the NAB's recommendation to the Commission that it allow FM broadcasters to use separate antennae for analog and digital transmission. This is an excellent solution for broadcasters that will allow for quick and economical implementation, encouraging stations to adopt the technology and further compel listeners to invest in receivers. IBOC's success is ultimately tied to how many consumers will demand the product.

Respectfully submitted this Eighth day of January, 2004.

By:_____

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